

AMENDMENTS TO THE SPECIFICATION

In the Abstract of the Disclosure:

Replace the Abstract of the Disclosure currently of record with the attached new Abstract of the Disclosure.

In the Specification:

Please amend the paragraph beginning on page 2, line 15, with the following amended paragraph:

This method is possible since a DVD-ROM player has been developed in expectation that it is to be connected with an analog television not equipped with a MPEG decoder. ~~so that~~ If it has a MPEG decoder as an internal component, ~~therefore, then~~ a DVD-ROM player can detect still marks contained in data streams while decoding the data streams recorded in a DVD-ROM disk.

Please amend the paragraph beginning on page 2, line 21, with the following amended paragraph:

However, a HDVD-player may not have a MPEG decoder as an internal component since it is under development on assumption that it may be connected with a digital television equipped with a MPEG decoder though a digital interface such as IEEE 1394 as aforementioned.

Please amend the paragraph beginning on page 2, line 26, with the following amended paragraph:

Therefore, even though still marks are inserted in every data stream section corresponding to still pictures in a HD-DVD as in a DVD-ROM, a HDVD player can not conduct a still operation if it has ~~not a~~ no decoder, that is, it can not detect the still mark.

Please amend the paragraph beginning on page 2, line 31, and continuing to page 3, with the following amended paragraph:

In addition, a digital television developed at present can not support the still function for a data stream when it receives the data stream from a HDVD player connected through a digital interface, so that it is urgently required to develop a method of presenting a specific data stream section from a disk device such as a HDVD player in a still picture at a digital television.

Please amend the paragraph beginning on page 3, line 12, with the following amended paragraph:

A still picture supporting method according to an embodiment of the present invention, when recording video data in an optical disk, writes still information indicating that a video data stream section is to be presented as a still picture, and writes information in a cell on whether there is a still picture in a stream object containing the video data stream section wherein the cell is linked with the stream object.

Please amend the paragraph beginning on page 3, line 19, with the following amended paragraph:

Another still picture supporting method according to an embodiment of the present invention, when recording video data in an optical disk, records video data in a streaming format, and writes a transport packet indicating that a data section among the recorded video data is still picture at a neighboring side of the

data section, wherein the contents of the transport packet [[is]] are not decoded when reproducing the recorded video data.

Please amend the paragraph beginning on page 3, line 26, with the following amended paragraph:

Another still picture supporting method according to an embodiment of the present invention, when reproducing a data stream recorded in an optical disk comprising a recorded video data stream_{[[;]]}, still information indicating that a video data stream section among the recorded video data stream is to be presented as a still picture_{[[;]]}, and information written in a cell on whether there is a still picture in a stream object containing the video data stream section wherein the cell is linked with the stream object, checks whether a video data reproduced from the disk is corresponding to a still picture, and conducts an iteration of transmitting a predictive picture data of the reproduced video data repeatedly after transmitting the reproduced video data based on the checked result.

Please amend the paragraph beginning on page 5, line 5, with the following amended paragraph:

FIG. 1 shows a digital television 200 and a HDVD player 100 to which a method for supporting a still picture of data stream recorded in a disk according to the present invention is applied. The digital television 200 and the HDVD player 100 are connected each other through an IEEE 1394 digital interface.

Please amend the paragraph beginning on page 5, line 10, with the following amended paragraph:

The data written in a HD-DVD which is to be playbaced in the HDVD player 100 is grouped into high-density stream objects (called 'HOBs' hereinafter). A HOB may correspond to a single program or a digital stream recorded from recording start to stop, and it is to be associated with each cell which is used for determining the playback sequence of moving picture contents recorded in ~~[[a]]~~ the HD-DVD.

Please amend the paragraph beginning on page 5, line 20, with the following amended paragraph:

As shown in FIG. 2, the data stream belonging to a certain HOB contains a still packet as still information. The function of a still packet is to command the digital television 200 to repeat ~~[[to]]~~ the decode decoding of a stream constituting a single picture following the still packet, instead of advancing the reproduction~~[[,]]~~. ~~and a~~ A still packet contains still duration information indicating how long the requested still operation should last~~[[s]]~~. The still duration is classified into two types: ~~[[of]]~~ the definite and the indefinite. The definite type may have a time value ranging from 1 to 254 seconds, and the indefinite type is used in a condition that a key command from a user is necessary.

Please replace the paragraph beginning on page 5, line 32 and continuing to page 6, with the following amended paragraph:

When the data stream recorded as in FIG. 2 is reproduced in the HDVD player 100 and is transmitted to the digital television 200 through the isochronous channel of the IEEE 1394 digital bus, the still packet is also transmitted to the digital television 200 without being decoded. When the digital television 200 receives the still packet while decoding the received data stream into real video and/or audio signal, it extracts still duration information from the received still packet. After that, the digital television ~~[[100]]~~ 200 decodes the data stream section, which ~~[[is]] following~~ follows the still packet~~[[,]]~~ and corresponds~~[[ing]]~~ to a single picture₁, and then repeats outputting of the just-decoded video picture during the time indicated by the extracted still duration information.

Please amend the paragraph beginning on page 6, line 12, with the following amended paragraph:

If the time indicated by the still duration information expires, the digital television 200 stops repeating ~~[[of]]~~ the decoding of the same picture (still picture), and then resumes the decode next pictures, which may have been already stored in an internal buffering memory, succeeding the still picture.

Please amend the paragraph beginning on page 6, line 20, with the following amended paragraph:

In the above-explained embodiment of the still picture supporting method, an additional command for holding a picture and resuming successive decoding need[[s]] not be sent from the HDVD player 100 to the digital television 200.

Please amend the paragraph beginning on page 6, line 25, with the following amended paragraph:

Instead of positioning a still packet before a still picture, a still packet may be preceded by a still picture. In this case, the HDVD player 100 may turn its mode into a pause without advancing to the next pictures as soon as it identifies a packet as a still [[one]] packet based on a packet header. And the digital television 200 repeats decoding a partial data stream, which is received prior to a still packet, and constitutes[[ing]] a single picture, when the received packet is determined as a still [[one]] packet. This interoperation between the HDVD player 100 and the digital television 200 can also achieve the still function.

Please amend the paragraph beginning on page 7, line 1, with the following amended paragraph:

As a variation, [[T]]the still packet may not contain information on the still duration. Instead, the HDVD player 100 resumes data reproduction from recorded data following the still packet and transmits the reproduced data stream to the digital television [[100]] 200 if a user requests release of still status.

According to the resumption of data reproduction, the digital television 200 receives data packets next to the still packet, then it acknowledges the ~~reception~~ receipt of data packet as release of still picture, and decodes the received data packets as soon as it stops the repetition of decoding ~~of one~~ the still picture.

Pleas amend the paragraph beginning on page 7, line 21, with the following amended paragraph:

And, a HOB is composed of high-density stream object units (referred 'HOBUs' hereinafter), and a data stream constituting a HOB is recorded across a ~~[[lot]]~~ plurality of data packs as shown in FIG. 3A. A data pack is a data accessing unit whose size is physically readable and/or writable at a time, that is, it ~~[[is]]~~ corresponding corresponds to a sector of a DVD-ROM. Each data pack ~~consists~~ is composed of a pack header and several transport packets written in it.

Please amend the paragraph beginning on page 7, line 29, and continuing to page 8, with the following amended paragraph:

The pack header comprises fields of 'STILL Indicator', 'SYS_PCR_base', 'SYS_PCR_ext, and 'Reserved'. A transport packet may contain a program clock reference (PCR) which ~~consists of~~ has a 9-bit extension value and a 33-bit base value according to the MPEG standard. The extension value is a modulo-300 counter that is incremented at a rate of 27 MHz, whereas the base value is incremented at a rate of 90KHz. If a transport packet contains a PCR, the PCR is copied to the fields of 33-bit 'SYS_PCR_base' and 9-bit 'SYS_PCR_ext',

respectively. The field of 'STILL Indicator' is a 1-bit flag and is used to indicate whether or not a data pack has data stream to be transmitted repeatedly. That is, if the flag is 1, it means that the pack and following packs including data of Intra-coded picture (I-picture) and predictive pictures (P-picture) should be transmitted repeatedly.

Please amend the paragraph beginning on page 8, line 11, with the following amended paragraph:

In addition, a cell associated with a HOB containing one or more still pictures ~~consists of~~ has general information and still picture entry point information as shown in FIG. 3B. The general information has various information on reproduction sequence of still pictures, whether there is a still picture or not, and the number of still pictures. And, the still picture entry point information has information indicating all of HOBUs in which data stream sections corresponding to still pictures are written. The information on whether there is still picture or not and the number of still pictures is written in 1-byte field of 'Still _YES'.

Please amend the paragraph beginning on page 8, line 22, with the following amended paragraph:

Therefore, when reproducing a HD-DVD, the HDVD player 100 examines information written in a cell to know whether there is a still picture and where the still picture is written among ~~a lot~~ many ~~[[of]]~~ HOBUs, and searches for a corresponding HOBUs based on the known information. Then, it examines the

successive pack headers belonging to the HOBUs to know whether the value of 'STILL Indicator' field is 1 or not.

Please amend the paragraph beginning on page 8, line 29, and continuing to page 9, with the following amended paragraph:

If the value is 1, the HDVD player 100 reads a data stream section containing I-picture data and next P-picture data only and then repeats to transmit the read data stream section to the digital television 200 as shown in FIG. 4. The I-picture data is composed of a sequence header, a header group of picture (GOP), and real video data, and the P-picture data is composed of a header and predictive real data.

Please amend the paragraph beginning on page 9, line 3, with the following amended paragraph:

The transmission ratio of I-picture to P-picture is 1:15. That is, a I-picture is transmitted once every 15 transmission of P-picture. When transmitting the I-picture repeatedly, the HDVD player 100 generates a PCR whose value is a transporting time of each transport packet constituting the I-picture, and inserts it into every packet[[s]] or every [[a]] few packets. When transmitting P-pictures repeatedly, the HDVD player 100 transmits the P-picture header only, without transmitting predictive real data.

Please amend the paragraph beginning on page 9, line 12, with the following amended paragraph:

The information of ~~transmitting~~ on the repetition duration, i.e., still duration, may be written in a cell or a pack header. If this information has been written, the HDVD player 100 resumes the next reproduction after stopping the transmitting of the repetition when the still duration expires[~~(,)~~]. ~~[[i]]~~If the information has not been written, it resume the next reproduction when a user requests to do that.

Please amend the paragraph beginning on page 9, line 18, with the following amended paragraph:

In this embodiment of the still picture supporting method, the digital television 200 does not need to ~~needs not~~ conduct an additional operation for still mode[~~(,)~~]. ~~[[i]]~~Instead, it just conducts a normal operation to decode the received data stream section provided repeatedly from the HDVD player 100.